

## **ABSTRACT OF THE DISCLOSURE**

The invention relates to a peritoneal dialysis sampling system to be used together with a peritoneal dialysis system which is programmed to deliver fluid to a peritoneal cavity of a patient and to drain the fluid from the cavity, said peritoneal dialysis system comprising a supplying line and supplying means for supplying dialysis fluid to the peritoneal cavity, a draining line and draining means for draining the fluid from the cavity, said peritoneal dialysis sampling system being characterized by the fact that it consists of an automatic sampling system which is able to automatically sample volumic fractions of the dialysate contained in the peritoneum of the patient at specific time intervals in order to evaluate the peritoneal membrane characteristics and/or improve the peritoneal dialysis for a given patient.